ENVIRONMENTAL QUALITY

CHAPTER 20

MAJOR FACILITY SITING

Sub-Chapter 9

Application Requirements for Service Area Utilities Explanation of Need for Generation, Conversion and Linear Facilities

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Sub-Chapter 9

Application Requirements for Service Area Utilities Explanation of Need for Generation, Conversion and Linear Facilities

- 17.20.901 GENERATION AND CONVERSION FACILITIES, EXPLANATION OF PURPOSE AND BENEFITS OF THE PROPOSED FACILITY
- (1) An application must contain an explanation of the purpose of the proposed facility and the benefits that it will provide. This includes a discussion of the likely markets it will serve and any other purposes it will serve and benefits it will provide. (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; <u>TRANS</u>, from DNRC, 1996 MAR p. 2863; <u>AMD</u>, 2001 MAR p. 2410, Eff. 12/7/01; <u>AMD</u>, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.902 GENERATION AND CONVERSION FACILITIES, RESOURCE FORECAST IS REPEALED (History: 75-20-105, MCA; IMP, 75-20-211, 75-20-503, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.903 GENERATION AND CONVERSION FACILITIES, POOLING, INTERCONNECTION, EXCHANGE, PURCHASE AND SALE AGREEMENTS IS REPEALED (History: 75-20-105, MCA; IMP, 75-20-211, 75-20-503, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.904 GENERATION AND CONVERSION FACILITIES, DATA REQUIREMENTS FOR ENERGY AND PEAK DEMAND IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.905 GENERATION AND CONVERSION FACILITIES, ASSESSMENT OF THE ROLE OF THE PROPOSED FACILITY IN MEETING ENERGY NEEDS IS REPEALED (History: 75-20-105, MCA; IMP, 75-20-211, 75-20-503, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.906 GENERATION AND CONVERSION FACILITIES, UNCERTAINTY ANALYSIS IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)

- 17.20.907 TRANSMISSION FACILITIES, REGIONAL RELIABILITY <u>CRITERIA</u> (1) An application for a transmission facility must contain a discussion of the reliability of the applicant's system and regional transmission system, including following:
- a description of the existing and desired levels of transmission system reliability and how the proposed facility affects the level of reliability;
- as relevant, an explanation of the rationale for the selection of the applicant's desired level of reliability;
- (c) the planning assumptions and rules used to maintain the desired level of transmission reliability;
- (d) as relevant, the expected frequency of interruption of service to customers on the applicant's transmission system under current reliability criteria, and the extent to which that frequency of interruption is associated with outages generation, transmission, and distribution facilities; and
- (e) an economic evaluation of alternate levels of reliability. (History: 75-20-105, MCA; IMP, 75-20-211, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; AMD, 2001 MAR p. 2410, Eff. 12/7/01; AMD, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.908 GENERATION AND CONVERSION FACILITIES, INTERRUPTIBLE AND CURTAILABLE LOAD DATA IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.909 GENERATION AND CONVERSION FACILITIES, DESTINATION AND DISTRIBUTION PATTERNS OF ENERGY TO BE PRODUCED IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; <u>TRANS</u>, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.910 GENERATION AND CONVERSION FACILITIES, ENERGY CONSERVATION PROGRAMS IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)
- 17.20.911 GENERATION AND CONVERSION FACILITIES, CATEGORIES FOR REPORTING CUSTOMER END-USE DATA IS REPEALED (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, 75-20-503, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; REP, 2001 MAR p. 2410, Eff. 12/7/01.)

Rules 17.20.912 through 17.20.919 reserved

- 17.20.920 ELECTRIC TRANSMISSION LINES, EXPLANATION OF NEED
- (1) An application for an electric transmission line must contain an explanation of the need for the facility based on, but not limited to, one or more of the following conditions:
- (a) transient stability considerations under normal or contingent operating conditions;
- (b) power transfer capacity under normal or contingent operating conditions;
- (c) voltage drop in the transmission or subtransmission network under normal or contingent operating conditions;
 - (d) reliability of service considerations; and
- (e) economy considerations. (History: 75-20-105, MCA; IMP, 75-20-211, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; AMD, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.921 ELECTRIC TRANSMISSION LINES, TRANSIENT STABILITY (1) For electric transmission lines where CONSIDERATIONS transient stability considerations are a basis of need, an application must contain the following information:
- (a) an explanation of the normal or contingent operating conditions, under which a transient stability problem exists, identification of the criteria used to determine these conditions, and an explanation of the rationale for their use; and
- (b) at least two stability studies, one to demonstrate the problem situation and one to demonstrate the solution. (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; <u>TRANS</u>, from DNRC, 1996 MAR p. 2863; <u>AMD</u>, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.922 ELECTRIC TRANSMISSION LINES, POWER TRANSFER <u>CAPACITY</u>, <u>VOLTAGE DROP</u> (1) For electric transmission lines where power transfer capacity or voltage drop is a basis of need, the application must contain an explanation of the problem situation including the following information:
- where thermal rating is referenced, identification of both the normal and emergency thermal ratings and an explanation of their effect on power flows;
- where normal transfer capacity of a transmission line is referenced, identification of a standard power factor and voltage drop limit;
- where emergency power transfer capacity under contingent operating conditions is referenced, identification of the voltage drop and power factor acceptable for the period of contingency;

- (d) identification of any applicable design or operating voltage drop standards or legal or contractual voltage drop restrictions;
- a minimum of three load flow studies. The load flow (e) studies must clearly indicate any assumptions made, including any relevant input data, and must include a single line diagram showing megawatts and megavar loads and flows and voltage levels for each study. The studies must include the following unless otherwise approved by the department:
 - (i) the base case, illustrating the problem;
- (ii) a study showing the immediate effect of the facility; and
- (iii) a study showing the effect of the facility five years later.
- (f) ten-year historical and 10-year projected load growth at each point of distribution in the area that would be served by the facility, including the following:
- a description of the assumptions used in making the projection, and an evaluation of the extent to which load growth in the area to be served by the facility will follow or differ for the patterns shown in overall service area load growth of the applicant;
- if additional block loads equal to 10% or more of a (ii) given substation load are anticipated, a list of the total connected load and the after-diversity-maximum demand for each additional load;
- (iii) for substations which are delivery points for resale customers, the applicant may substitute the resale customer's forecast of load growth at that delivery point for the applicant's own forecast. In such cases an evaluation of the resale customer's forecasting method must be included; and
- (iv) an explanation of the amount of excess capacity which will be available after the proposed transmission line is built, under contingent and normal conditions, and an estimate of when additional reinforcement will be necessary. (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; AMD, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.923 ELECTRIC TRANSMISSION LINES, RELIABILITY OF <u>SERVICE</u> (1) For electric transmission lines where reliability of service is a basis of need, an application must contain the following:
 - (a) the information required by ARM 17.20.922(5) and (6);

- (b) a description of the planning assumptions and rules by which the applicant attempts to maintain its desired level of generation and transmission reliability, and an explanation of the rationale for the selection of the desired level of reliability. To the extent this information has been provided in ARM 17.20.907, it need not be duplicated here.
- (c) to the extent available 10 years historical line outage data in the area to be served by the proposed facility including the duration, location, and cause of the outage, the load lost, and the number and type of customers affected, if known. (History: 75-20-105, MCA; IMP, 75-20-211, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; AMD, 2005 MAR p. 252, Eff. 2/11/05.)
- 17.20.924 ELECTRIC TRANSMISSION LINES, ECONOMY CONSIDERATIONS (1) For electric transmission lines where economy considerations are a basis of need, an application must contain the following, as relevant:
- (a) a system cost study for the 10 years following the date the proposed line is to be placed in service, showing system costs with and without the proposed line;
- (b) an analysis of markets and prices for surplus energy or of the need for and alternative sources of firm energy to be transmitted over the proposed line;
- (c) an analysis of sources and prices for purchased energy to be received over the proposed line;
- (d) an analysis of the demand for and price of wheeling services to be provided by the proposed line;
- (e) other economic analysis relevant to demonstrating the need, economic feasibility or financial viability of the proposed line;
- (f) a discussion of the relationship of the capacity of the proposed facility to the size of projected flows over the facility; and
- (g) if transmission capacity exists that could carry the desired energy or power flows without violating voltage drop, transfer capacity or other transmission planning criteria, a discussion of efforts by the applicant to reach an acceptable agreement with the owners of this transmission capacity to make it available to the applicant at reasonable cost and an explanation of why the proposed facility is preferable to use of the existing facility.
- (2) If the transmission grid is managed by a regional transmission organization (RTO) formed under FERC order 2000, the application must report:

- (a) the extent of congestion and the costs of congestion throughout the year, with and without the proposed facility, for each affected flow path on the regional grid;
- (b) a projection of the transmission rights that would be created by the proposed facility; and
- (c) planning evaluations of the proposed facility written either by the RTO or another regional planning organization. (History: 75-20-105, MCA; <u>IMP</u>, 75-20-211, MCA; <u>NEW</u>, 1984 MAR p. 1844, Eff. 12/28/84; <u>TRANS</u>, from DNRC, 1996 MAR p. 2863; <u>AMD</u>, 2005 MAR p. 252, Eff. 2/11/05.)

Rules 17.20.925 through 17.20.927 reserved

17.20.928 OTHER LINEAR FACILITIES, EXPLANATION OF NEED

(1) Applicants for other types of linear facilities, such as pipelines, should contact the department for appropriate information requirements for determining need for the facility. (History: 75-20-105, MCA; IMP, 75-20-211, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; <u>TRANS</u>, from DNRC, 1996 MAR p. 2863; <u>AMD</u>, 2005 MAR p. 252, Eff. 2/11/05.)

17.20.929 LINEAR FACILITIES, INTERCONNECTION AGREEMENTS

- (1) An application for a linear facility must include either a copy of any and all interconnection agreements involving the proposed facility, or the following information for each such agreement:
- a brief description of the obligations of and the benefits to the facility under the agreement;
 - (b) a list of all parties to the agreement;
- the time period during which the agreement is in (C) effect;
 - (d) a summary of the terms of the agreement; and
 - (e) the financial agreements.
- An application for a linear facility must include a (2) description of all current and planned negotiations with respect to interconnection of the facility and transmission of energy. The description must include a list of the parties to any negotiations and a general discussion of the history and current status of the negotiations. (History: 75-20-105, MCA; IMP, 75-20-211, MCA; NEW, 1984 MAR p. 1844, Eff. 12/28/84; TRANS, from DNRC, 1996 MAR p. 2863; AMD, 2001 MAR p. 2410, Eff. 12/7/01; <u>AMD</u>, 2005 MAR p. 252, Eff. 2/11/05.)

Sub-Chapters 10 and 11 reserved